

MANUFACTURING METHOD FOR AN ELECTROPHORETIC DISPLAY

ABSTRACT OF THE DISCLOSURE

a manufacturing method for an electrophoretic display
5 applying optical polymer material is provided. The main
characteristic is that the charged pigment particles are
confined with optical polymer material so as to achieve
electrophoretic display. In the manufacturing process, a
first layer of optical polymer material is coated on an
10 auxiliary substrate having a buffer layer for performing
an optical polymerization manufacturing process. After the
polymerization, on the first layer of the optical polymer
material layer, the manufacturing process required by the
electrophoretic display is further performed. After a
15 second layer of optical polymer material is coated on a
substrate required by the electrophoretic display having
a plurality of electrode patterns, by using a mask exposure,
the optical polymer material is solidified to form a polymer
wall, or a molding method is applied with ultraviolet
20 irradiation for solidifying the optical polymer material
so as to form the polymer wall. Next, in a hole formed by
the polymer wall, the mixture formed by the charged pigment
particles and a few amount of optical polymer material is
filled, and the auxiliary substrate is aligned with the

substrate so as to perform the mask exposure polymerization manufacturing process. Therefore, the auxiliary substrate is combined with the substrate. Finally, the auxiliary substrate is stripped out so as to finish the manufacturing
5 of a single substrate electrophoretic display.